a touch operation to the display function. In this way, segmentation time for displaying a frame of black image does not need to exist between a display phase and a touch phase, it may be enabled that the display phase and the touch phase proceed simultaneously or continuously. Herein, the thickness of the resin insulating layer **402** may be adjusted according to actual application requirements and "thicker" denote a meaning that the effect of a touch operation to the display function is low enough to implement the basic objective of the present disclosure. In the present disclosure, it is unnecessary to specifically limit the thickness.

[0033] Therefore, as shown in FIG. **3**, when a thicker resin insulating layer **402** is disposed between the cathode **201** and the self-capacitive touch electrodes **300**, during a touch phase, the top-emitting type organic electroluminescent structures **200** may also display an image. In this way, touch and display may proceed simultaneously, and the performance of the touch display panel is improved.

[0034] In the embodiments of the present disclosure, in order to guarantee an aperture ratio of the self-capacitive touch display panel, the material of the self-capacitive touch electrodes may comprise a transparent conducting material. It is to be noted that the self-capacitive touch electrodes may be formed by way of vacuum thermal evaporation to effectively prevent water vapor from entering and protect the top-emitting type organic electroluminescent display structures. The self-capacitive touch electrodes may also be formed by way of printing, and a specifical method for forming the self-capacitive touch electrodes may be determined according to the actual situation, which is not limited herein.

[0035] In the embodiments of the present disclosure, the material of the self-capacitive touch electrode may comprise one or more of indium tin oxide (ITO), indium zinc oxide (IZO), tin oxide (TO), tin antimony oxide (TAO), indium oxide (TO), cadmium oxide (CdO) or graphene. Specifically, the specifical material of the self-capacitive touch electrodes may be selected according to the actual situation, which is not limited herein.

[0036] In the embodiments of the present disclosure, in order not to increase the complexity of processes, the touch leads and the self-capacitive touch electrodes may be positioned at the same layer and are made of the same material so that figures of the touch leads and the self-capacitive touch electrodes may be formed in the same composition process, thereby simplifying the process and saving the cost.

[0037] In the embodiments of the present disclosure, generally the self-capacitive touch display panel may also have other film layer structures such as a light emitting layer, a hole transport layer, an electron transport layer and the like, and generally structures such as thin-film transistors, gate lines, data lines and so on are formed on the substrate. And these specifical structures may have a plurality of implementation manners, which is not limited herein.

[0038] Based on the same inventive concept, the second embodiment of the present disclosure further provides a display device comprising the above mentioned self-capacitive touch display panel provided by the embodiments of the present disclosure. The display device may be any product or component having display function, such as a mobile phone, a tablet computer, a TV set, a display, a notebook computer, a digital photo frame, a navigation device and so on. Other essential components of the display device are comprehensible to persons of ordinary skill in the art, they are not necessarily described herein and shall not constitute a limitation of the present disclosure. The implementation of the display device may be seen in the embodiments of the above mentioned self-capacitive touch display panel, and what is repeated is not described again.

[0039] By adding the self-capacitive touch electrodes above the top-emitting type organic electroluminescent structures, the touch display panel and the display device provided by the embodiments of the present disclosure integrate the embedded self-capacitive touch technology with the organic electroluminescent technology, the touch display panel and the display device not only reduce the thickness of the touch display panel, but also guarantee a whole layer cathode structure of the organic electroluminescent structures and effectively guarantee the display quality of the original product.

[0040] The foregoing description of the embodiments has been provided for purposes of illustration and description. It is not intended to be exhaustive or to limit the disclosure. Individual elements or features of a particular embodiment are generally not limited to that particular embodiment, but, where applicable, are interchangeable and can be used in a selected embodiment, even if not specifically shown or described. The same may also be varied in many ways. Such variations are not to be regarded as a departure from the disclosure, and all such modifications are intended to be included within the scope of the disclosure.

1. A self-capacitive touch display panel comprising a substrate and a plurality of top-emitting type organic electroluminescent structures, which are disposed on the substrate and share one cathode,

the self-capacitive touch display panel further comprising:

a plurality of self-capacitive touch electrodes, which are disposed at the same layer, positioned above the cathode and insulated with the cathode;

a plurality of touch leads, which are electrically connected with the plurality of self-capacitive touch electrodes; and

a touch detection circuit, which is configured to determine a touch position by detecting the change of capacitance values of the self-capacitive touch electrodes during a touch phase;

wherein the self-capacitive touch electrodes are connected to the touch detection circuit by way of the respective touch leads.

2. The self-capacitive touch display panel according to claim **1** wherein the cathode and an anode of the top-emitting type organic electroluminescent structure are inputted with a signal which is identical to a drive signal of the self-capacitive touch electrode, during the touch phase.

3. The self-capacitive touch display panel according to claim **2** wherein the top-emitting type organic electroluminescent structure is configured to display black image during the touch phase.

4. The self-capacitive touch display panel according to claim **1** further comprising a resin insulating layer disposed between the cathode and the self-capacitive touch electrodes.

5. The self-capacitive touch display panel according to claim **4** wherein the top-emitting type organic electroluminescent structure is configured to display an image during the touch phase.